

DRAFT

<<Fill-in Offeror Name>>

**EVOLVED EXPENDABLE LAUNCH VEHICLE (EELV)
PROTOTYPE
LAUNCH SERVICE AGREEMENT**

ANNEX C ATTACHMENT 2

MILESTONE PAYMENT PLAN

Agreement No.: FA8811-17-X-XXXX

DRAFT

A. Basis of Payment

The Government will award funding levels consistent with the needs of the awardees, consistent with the highest risks and best systems, and consistent with USG funding limitations. The basis of payment for this effort shall be a series of milestones scheduled throughout the period of performance of this Agreement. The milestones represent meaningful efforts that are an integral and necessary part of performance. Each milestone shall have associated with it measurable success criteria which serve to validate accomplishment of the milestone. All milestone success criteria must be met before the milestone payment will be authorized. The process for payment is as follows:

1. When the Participant has successfully completed all applicable milestone success criteria, the Participant shall submit a request for payment to the Space and Missile Systems Center, Launch Enterprise Directorate (SMC/LE) Agreement Officer (AO) or Agreements Officer Representative (AOR). The request for payment shall include the formal delivery of the completion evidence in order to substantiate meeting the milestone success criteria. Alternatively, the request for payment may also reference deliveries of completion evidence that happened prior to the request for payment, if applicable. The request for payment shall also include an updated version of Table 1, showing actual amounts. Additionally, with each milestone payment request the Participant shall fill out and provide Table 2: Cost Element in Dollars, to include actual costs incurred to date. This request for payment shall be sufficient for the Government to reasonably verify the accomplishment of the success criteria for each milestone.
2. The AOR will determine whether the Participant has successfully met each of the milestone success criteria based on inputs provided by the United States Government (USG) Team.
 - a. The USG Team consists of the Air Force Space and Missile Systems Center, Launch Enterprise Directorate (SMC/LE) and Air Force Program Executive Officer for Space (AFPEO/SP) office personnel, but also includes The Aerospace Corporation, LR's Systems Engineering and Integration (SE&I) contractor, LR's Systems Engineering and Technical Assistance (SETA) support contractor, the National Reconnaissance Office, Office of Space Launch (NRO/OSL), Defense Contract Management Agency (DCMA), Defense Contract Audit Agency (DCAA), and other organizations as designated by the AO.
 - b. If the Government determines there is not enough information to reasonably verify the accomplishment of the milestone, the Participant will provide additional information requested by the Government. For milestones identified as incomplete, the AOR will: (1) specify in the notification the issue(s) that led to the determination based upon the milestone success criteria and completion evidence provided herein, and (2) the corrective action(s) required to complete the milestone. The Government and Participant will ensure agreement and understanding of the corrective actions, and the Participant will make a good faith effort to quickly reconcile any incomplete milestones.
 - c. When the Participant accomplishes the corrective actions, if any, the Participant will submit a request for payment addendum to the AO for Government review.

To the maximum extent possible within fifteen (15) business days after receipt of the Participant's request for payment addendum, the AO will provide a written notification to the Participant specifying whether the Government concurs that all corrective actions have been accomplished and the milestone has been "met" (completed).

3. Once the Government has determined the milestone(s) have been met, the Government will provide notification of approval to the Participant. To the maximum extent possible within fifteen (15) business days after receipt of the Participant's request for payment, the AOR will provide written notification to the Participant specifying which milestones contained in the request for payment are determined to be "met" (complete) and, if necessary, which are considered "not met" (incomplete).
4. The Participant may then submit the approval notification and an invoice through Wide Area Work Flow (WAWF) for the appropriate payment(s) amount in accordance with Article VI - Obligation Payment and Schedule.

B. Event Milestone Payments and Event Timing

The request for payment may not be submitted more often than once monthly, regardless of how many milestones have been completed in that month. Therefore, the request for payment may include a payment request for multiple milestones. Completion of milestones and subsequent requests for payment may be submitted non-successively (e.g., if milestone three is completed before milestone two, then the Participant may submit a request for payment for milestone three before a request for payment for milestone two). In the event the Participant completes a milestone ahead of the milestone completion date, the Participant may submit the required payment request and completion evidence to the Government and the Government will consider the early payment of the milestone on a case-by-case basis.

For each milestone, the Estimated Completion Date is the estimated date that the Participant will complete the payment event and submit the associated request for payment of each milestone under this Plan.

C. Event Milestone Schedule

A list of sample milestones appears in Table 1. Offerors should replace these sample milestones with events tailored to the proposed launch system development effort representing meaningful progress towards a working prototype. Milestones should be planned with enough frequency that they may be used as a means to monitor progress and serve as decision points for continued funding. The Participant shall not receive payments in excess of 2/3 of the total Launch Service Agreement (LSA) cost.

D. Final Milestone Payment

The final milestone payment is subject to adjustment in the event that the total industry investment is less than 1/3 of the total cost. The Participant/Government share for this agreement is [insert Participant share] %/ [insert Government share] % (Government share cannot exceed 2/3). At any point in time, the Government's cumulative payments will

not exceed the Government share percentage or the dollars in the payment table, whichever is less.

In the event the total actual incurred cost is less than shown in this Agreement, the final milestone payment will be reduced so that the cumulative Government payment is [insert Government share] % of the total actual incurred cost. In the event the total actual incurred cost is more than shown in this Agreement, the final milestone payment will be reduced so that the cumulative Government payment is limited to the total dollars of Government investment defined in the payment plan.

E. Delegation

The roles and responsibilities of the AO in this document may be delegated in whole or part to an Agreements Officer Representative (AOR).

Table 1: Milestone Payments

Milestone	RPS or Launch Sys	Payment Event	Estimated Completion Date	Total Payment Dollar Value*	Total Cumulative Payment Dollar Value	Industry Cash Investment	Industry In-Kind Investment	Government Property Rental Equivalency	Industry % of Total Combined Investment
1**	Filled In By Offeror	Program Implementation Plan Review (PIPR)	Filled In By Offeror (NLT 30 days after authority to proceed)	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
2	Filled In By Offeror	Booster Test Readiness Review	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
3	Filled In By Offeror	Financing Round 1	Filled In By Offeror	N/A	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
4	Filled In By Offeror	Critical Design Review (CDR)	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
5	Filled In By Offeror	Upper Stage Test Readiness Review	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
6	Filled In By Offeror	Qualification Program Complete	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
7	Filled In By Offeror	Final Certification of Launch System (NECG)	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
8**	Filled In By Offeror	Submittal of Final Report	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%
Totals			Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	Filled In By Offeror	x%

*The dollar amount for each milestone is to be filled in by the Offeror. No adjustment to the payment will occur after milestone award.

**Mandatory milestones.

Table 2: Cost Elements in Dollars (\$)

Direct Labor	
Indirect Labor (e.g., Fringes)	
Company Overheads (e.g., G&A)	
Materials	
Subcontracts	
Other Direct Costs (not captured in other cost elements)	
Total Cost	

F. Description of Investment

Cash contributions consist of: *<To be filled out by offeror>*

In-Kind contributions consist of: *<To be filled out by offeror>*

G. Milestone Writing Guide *<Do not include in final proposed Payment Plan.>*

The Offeror shall propose a schedule of milestones and payments for the proposed launch system prototype development effort that includes key milestones consistent with the Certification Plan(s) included as an Annex(es) to the Statement of Work (SOW). The Offeror shall limit milestone payments to significant events, such as delivery of data information, successful design review accomplishment, major programmatic meetings, completion of tests or certification flights, or financial milestones.

Sample milestone language for the most common items is listed below. Milestones may be coupled as shown in the first example under the Design Reviews section. In this example, the first milestone is for payment against the delivery of data. The second milestone is for payment against acceptance of the data. Coupled milestones may be proposed for design reviews, tests, and certification flights.

DESIGN REVIEWS

Design reviews are a major development milestone and should be included as milestones in the Offeror's Payment Plan.

The success criteria for design reviews must be linked to the Offeror's Certification Plan for the entrance and exit criteria and for the objectives of the review. The Offeror shall include read-aheads provided at least 7 days prior to the review.

The Offeror shall include delivery of the review package and a closure plan for action items in each milestone.

[Italicized items in brackets should be replaced with appropriate term for the review]

Milestone #A: CDR

Description: Conduct Systems CDR *[Include description of event from appropriate section of the Certification Plan]*

Scheduled Date: *[provide estimated completion date]*

Success Criteria: Milestone event is closed upon completion of the following:

1. Government concurs that CDR meets the intent of *[insert appropriate design review standard listed in the Certification Plan]*

Completion Evidence:

1. Define the set of Segment and/or Subsystem level CDRs (including suppliers) that adequately encompass a system level CDR (referred to as CDRs below), subject to Government agreement
2. Notify the Government of CDRs at least 30 days prior to execution
3. Conduct CDRs consistent with *[insert appropriate design review standard listed in the Certification Plan]* and assist in facilitating Government participation in those reviews if requested
4. Provide preliminary CDR data packages to the Government at least 7 days prior to CDR. In the case where the CDR is broken across multiple days, segments or subsystems, the data package deliveries may also be broken apart and delivered at least 7 days prior to the applicable portion of the review.
5. Minutes and attendance list.
6. List of action items, POCs and closure plan
7. The Government concurs with successful completion of the review in accordance with the Success Criteria above.

Payment Amount: \$X

Milestone #B: CDR Follow-up

Description: Conduct Systems CDR *[Include description of event from appropriate section of the Certification Plan]*

Scheduled Date: *[provide estimated completion date]*

Success Criteria: Milestone event is closed upon completion of the following:

1. Government concurs that Participant adequately responded to data requests from CDRs
2. List of action items, POCs and closure plan

Completion Evidence:

1. Respond to requests for additional CDR data from the Government

Payment Amount: \$X

Milestone #C: SRR/PDR/CDR/or other review (except TRR)

Description: *[Include description of event from appropriate section of the Certification Plan]*

Scheduled Date: *[provide estimated completion date]*

Success Criteria: Milestone event is closed upon completion of the following:

- 1) Government concurs that *SRR/PDR/CDR/or other review* meets the intent of *[insert reference to exit criteria from appropriate section of the Certification Plan]*

Completion Evidence:

- 1) Presentation package provided at least 7 days prior to the *SRR/PDR/CDR/or other review*

- 2) Minutes and attendance list.
- 3) List of action items, POCs and closure plan
- 4) The Government concurs with successful completion of the review in accordance with the Success Criteria above.

Payment Amount: \$X

TEST READINESS REVIEWS

Test Readiness Reviews for major assemblies and subassemblies should be included as part of the Payment Plan.

The Offeror shall include the test matrix and test plan in the Success Criteria for test readiness reviews. The Offeror shall also include information in the Success Criteria that demonstrates the test facility has been activated and is capable of conducting the tests should be presented, such as cold flow tests and sequence checks.

The completion evidence must include delivery of the review package and Government concurrence to enter testing.

[Italicized items in brackets should be replaced with appropriate term for the review]

Milestone #D: Test Readiness Review (TRR)

Description: *Provide a description of the test to be completed. Include the purpose of the test campaign and expectations on the test objectives to be completed*

Scheduled Date: *[provide estimated completion date]*

Success Criteria: Milestone event is closed upon completion of the following:

- 1) A preliminary agenda and test success criteria have been provided prior to conducting the TRR
- 2) TRR package, including the test matrix, objectives, previously conducted sequence checks, cold flow tests, and test campaign schedule has been made available to the cognizant participants at least 7 days prior to the TRR
- 3) The TRR success criteria meets the *[insert reference to exit criteria from appropriate section of the Certification Plan]*

Completion Evidence:

- 1) Presentation package
- 2) Minutes and attendance list.
- 3) List of action items, POCs and closure plan
- 4) The Government concurs with successful completion of the review in accordance with the Success Criteria above.

Payment Amount: \$X

TEST COMPLETION

Major test events are critical milestones in the development of a launch system and should be included as part of the Payment Plan.

For major test event milestones, the Offeror shall demonstrate that the test objectives for the

campaign have been met and the data is of sufficient quality to aid in subsequent design work for development testing or to prove the system has met the requirements of the program for qualification and acceptance testing.

The Government recognizes that test failures are a part of a development program and that often much about a system can be learned from a failed test. The Offeror shall include a statement concerning the possibility of a failure during testing: “The Participant will provide the Government with the root cause analysis and risk mitigation plan for how the program proceeded during test and also how this will affect future development.”

The Offeror shall include a test report summarizing the data and conclusions of the test campaign. The Offeror shall provide the raw data for Government analysis for Independent Verification and Validation.

Milestone #E: *[Level of campaign: Development, Acceptance, Qualification, Sub-component, etc]* **Test Event Complete**

Description: *[Offeror]* shall conduct a *[test series]* on *[item to be tested]*. The test series shall be completed in accordance with the development test program plan per the Participant’s approved Certification Plan *[insert reference to development test program plan from appropriate section of the Certification Plan]*.

Scheduled Date: *[provide estimated completion date]*

Success Criteria: Milestone event is closed upon completion of the following:

- 1) The objectives for the test series are met as described in the test plan
- 2) Completion of test plans
- 3) Test failure analysis, subsequent test and program risk mitigation plans developed, as required

Completion Evidence:

- 1) The Government concurs with successful completion of test series objectives
- 2) Government receives copy of Test Report, Data Review Package, and raw data
- 3) In the event of a test failure, the Participant shall provide the Government with the root cause analysis and risk mitigation plan for how the program proceeded during test and also how this will affect future development.

Payment Amount: \$X

PROGRAMMATIC REVIEWS

Major programmatic review include the Program Implementation Plan Review (PIPR) held within 30 days of authority to proceed (ATP), Program Management Reviews (PMR) as defined in the Statement of Objectives (SOO), and Final Programmatic Reviews held at the end of the period of performance.

Milestone #F: Program Implementation Plan Review (PIPR) or Program Management Review (PMR)

Description: The Participant shall conduct a *Program Implementation Plan Review or Program Management Review* within 30 calendar days of the start of the Agreement to describe the plan for program implementation. The Participant shall provide a presentation of the program plan, along with hard copies of the presentation materials and responses to any Government action

items. The review will be conducted with Government participation at the agreed upon location or by teleconference.

Scheduled Date: 30 days after ATP

Success Criteria: Milestone event is closed upon completion of the following:

- 1) Conducted the Program Implementation Plan Review meeting, including the following topics
 - a. Status of launch system development
 - b. Progress against the Certification Plan(s) and schedule
 - c. Management planning for Design, Development, Testing & Evaluation (DDT&E)
 - d. Integrated program schedule and resource requirements to the element and subsystem level through launch system prototype completion
 - e. Supplier engagement
 - f. Development risks and anticipated mitigations
 - g. Technical Performance Measurements (TPMs)
 - h. Status of system safety program, including identifying and tracking of system safety hazards, identifying hazard mitigation options, identifying residual risk levels, and reporting residual risk levels to the EELV Program Office
 - i. Identification of development risks and risk handling plans
 - j. Business case analysis updates
 - k. Cost summary reporting. The cost summary reporting shall identify total development funding expended to date for this launch system development effort to include a breakout of funding from Government sources and from non-Government sources.
- 2) Participant's management assignment of closure responsibility and closure date for any approved Action Items identified during the review.
- 3) Presentation of how the Payment Plan fits within the Participant's approved Certification Plan.
- 3) Participant provided review presentation at least 7 days prior to the review.

Completion Evidence:

- 1) PIPR presentation package, minutes, and attendance list
- 2) List of action items, POCs and closure plan
- 3) The Government concurs with successful completion of the review in accordance with the Success Criteria above.

Payment Amount: \$X

MISC ITEMS

The Offeror shall customize the proposed Payment Plan to the approved Certification Plan for the proposed launch system prototype. All milestones shall follow the same format, listing the following items: Purpose, Estimated Completion Date, Success Criteria, Completion Evidence, and Payment Amount.

To the greatest extent practical, the Offeror shall link Success Criteria to the appropriate part of the Certification Plan.

The Completion evidence must show how the Participant successfully completed the Success Criteria. In doing so, the Offeror shall demonstrate that the Success Criteria have been completed. Completion Evidence shall be items of substance that the Government can review and use to effectively show completion of the Success Criteria.

Based on previous OTA experience, a table is shown below listing items that will not be accepted as completion evidence and what should be used in their place. Please note, the intent of the Government is not to create additional work beyond what is typically required by the Participant to complete an item. Thus, if an item listed is not typically generated, but a similar process is completed that meets the intent of demonstrating successful completion, that item would most likely be considered acceptable Completion Evidence.

Not Acceptable Completion Evidence:	Instead Use:
Photograph of completed item	Non-Destructive Testing Report Inspection Report Results Test data
Item Delivery Receipt	Participant acceptance of part report Inspection Report Results
Developed Specification	Documentation showing the specification meets the requirements of the program